

1. A telecommunications signaling processing system for a call from a caller number to a called number comprising:

a signaling interface configured to receive a signaling message;

a validation table to determine if the call should be allowed based on whether the caller

5 number is delinquent on payment;

echo control to enable an echo canceller if the call is a voice call and to disable the echo canceller if the call is a data call;

a POTS process to translate the called number to a route instruction if the called number is a POTS number;

10 an N00 process to translate the called number to the route instruction if the called number is an N00 number;

a VPN process to translate the called number to the route instruction if the caller number or the called number is a VPN number;

a control interface to transfer a control instruction indicating the route instruction,

15 wherein the route instruction comprises an identifier;

wherein an interworking unit receives the route instruction, and in response, adds the identifier to headers of packets that will carry user communications for the call and transfers the packets to a communication system; and

wherein the communication system routes the packets that carry the user communications

20 for the call based on the identifier in the headers of the packets.

2. The telecommunications signaling processing system of claim 1 further comprising a platform handler to check the signaling message for flaws.

3. The telecommunications signaling processing system of claim 1 further comprising a call block to provide a repository of call information to bill the call.

4. The telecommunications signaling processing system of claim 1 further comprising a voice messaging process to transfer the call to a voice messaging platform if the called number is busy.

5. The telecommunications signaling processing system of claim 1 further comprising a mobility process to handle terminal mobility by accessing a database that is updated when called parties change locations.

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6. The telecommunications signaling processing system of claim 1 further comprising a service manager to access network databases and obtain service information for the call.

7. The telecommunications signaling processing system of claim 1 further comprising a man  
15 machine interface to allow a remote operator to control the telecommunications signaling processing system.

8. The telecommunications signaling processing system of claim 1 wherein the signaling message comprises a Signaling System Seven (SS7) Initial Address Message (IAM).

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9. The telecommunications signaling processing system of claim 1 wherein the signaling interface comprises Signaling System Seven (SS7) Message Transfer Part (MTP) levels one, two, and three.

10. The telecommunications signaling processing system of claim 1 further comprising logic to select a decibel level for the call.
11. The telecommunications signaling processing system of claim 1 further comprising logic to 5 select a compression for the call.
12. The telecommunications signaling processing system of claim 1 further comprising logic to select encryption for the call based on the caller number or the called number.
- 10 13. The telecommunications signaling processing system of claim 1 wherein the identifier comprises an Asynchronous Transfer Mode (ATM) virtual identifier.